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Marshall Space Flight Center

September 9, 1998



NASA photo

Employees at Marshall drill a well to take ground-water samples at one of the 95 sites identified as part of the federal Superfund Program on Center. The proposed plan by Marshall to take no further action on 22 of these sites is based on findings that the sites do not pose a threat to human health or the environment.

Under Federal 'Superfund' Program

No Action Seen Necessary at 22 of 95 Center Sites

A fter five years of detailed study, Marshall has concluded that no further action is necessary at 22 of the 95 sites within the Center that have been identified as part of the federal Superfund Cleanup Program.

The proposed plan to take no further action at the 22 sites is based on findings indicating that the sites, which were used for a variety of purposes such as washing vehicles, painting, disposing of rocket-related materials, materials storage, and drainage, do not pose a threat to human health or the environment.

Study of the remaining sites is continuing under the Superfund Program by the Center's Environmental Engineering and Management Office in cooperation with the U.S. Environmental Protection Agency and the Alabama Department of

Environmental Management.

The Center's Environmental Engineering and Management Office will host information sessions for employees at Marshall from 11 a.m.-1 p.m. Sept. 17 in the Bldg. 4203 cafeteria and Sept. 22 in the Bldg. 4610 cafeteria.

"The Environment in Progress: Embracing the Balance" — a video describing the Superfund process and activities at Marshall — is scheduled to air Sept. 15 on closed-circuit television Centerwide. Broadcast times will be announced at a later date.

A public comment period on the proposed plan is Sept. 16-Oct. 15 and a public meeting will be held from 5-7 p.m. Tuesday, Sept. 29, at the Huntsville/Madison County Public Library.

The presence of substance residues at the sites is due to their use

See Superfund on page 5

Goldin to Visit Here Friday

ASA Administrator Daniel Goldin is scheduled to visit Marshall Friday, Sept. 11. He will brief employees on "New Frontiers in Engineering" from 9:45 to 11:30 a.m. in Bldg. 4200, Morris Auditorium.

The briefing will include a multimedia presentation outlining NASA's strategic vision in each of its four enterprises. Goldin also will discuss the type of tools that will be needed to implement the strategy and how the development of technologies and future systems will revolutionize the entire field of engineering. Future characteristics of this new engineering environment — which will enable engineers and scientists to work as collaborative teams from program concept through design and mission operations — will be presented.

Employees are encouraged to attend and to participate in a question and answer session with the Administrator after the presentation.

The briefing will be aired on

See Goldin on page 5

Around Marshall

Access Center's 'Hot News' Online

One of Marshall's newest Web sites offers viewers "Hot



News" about Marshall people and programs. The site also offers news releases, fact sheets on various Marshall programs and projects, photos, Quicktime movies and more.

Marshall's "News Center" site — updated as Center-related events occur — is located on the "Inside Marshall" homepage under the "News Source" information topic, or may be found at the following address: http://www.msfc.nasa.gov/news

Employee Feedback Meeting 1:30 p.m. Today

Acting Center Director Carolyn Griner says she is ready to listen to employee reaction to the thoughts she shared at a recent series of town meetings.

An Employee Feedback Meeting will be held from 1:30-3 p.m. today in Bldg. 4666, room 371-H. Seating capacity is 40.

All-Hands Meeting Set for Sept. 15

An All-Hands Meeting will be held at 10 a.m. Tuesday, Sept. 15, in Bldg. 4200, Morris Auditorium.

Employees who are unable to attend may view the meeting on Centerwide closed-circuit television.

Imaginations Will Soar During AIAA's Great Paper Airplane Contest Sept. 18

The American Institute of Aeronautics and Astronautics' (AIAA) 4th annual Great Paper Airplane Contest will be held from 3:30-5:30 p.m. Sept. 18 in Bldg. 4752.

The contest, hosted by AIAA and NASA, is designed to help teach children and adults about the science and art of



NASA photo

Children and adults will have the opportunity to test their aircraft design and aviator skills during the Great Paper Airplane Contest Sept. 18 in Bldg. 4752.

aeronautics by spurring imaginations and generating excitement.

Children will have the opportunity to try their hands at being aircraft designers and aviators as they compete at flying paper airplanes. Amateur designers in three age catagories will compete for trophies in the areas of acrobatics, distance, time of flight, accuracy and artistic appeal.

The contest is free and open to the public. For more information contact Paul Luz at 544-0512.

Volunteers Needed for Center's Community Service Day Sept. 19

V olunteers are needed from across the Center to participate in Marshall's fourth annual Community Service Day to be held from 9 a.m.-1 p.m. Sept. 19.

As part of the Combined Federal Campaign (CFC), Community Service Day is designed to involve employees at Marshall in experiencing the work of local CFC recipients first-hand, according to this year's coordinator Karen Dugard. Marshall's campaign theme is "Caring is Sharing."

All employees at Marshall and their family members may volunteer to help with the following projects:

- Care Assurance System for the Aging and Homebound Volunteer activities include building wheel chair ramps, preparing yards for winter and visiting with home owners.
- Christmas Charities Volunteer activities include sorting children's clothing and helping to make toys usable.
- Habitat for Humanity Volunteers with ladders and hammers are needed to install trusses and wall sheathing, and deck the roofs on three houses under construction.
- The Salvation Army Volunteers are needed to organize the Food Pantry, prepare and serve meals, and clean the kitchen and dining room.
- Hospitality House Yard maintenance volunteers are needed to mow a small lawn, weed flower beds and plant pansies. Help is also needed in pricing items for an Oct. 3 yard sale and in doing basic housework.

If you are interested in volunteering e-mail Karen Dugard at karen.dugard@msfc.nasa.gov or call 544-0037.

Safety, Work Stand-Down Day Set For Sept. 23 at Marshall Center

A cting Center Director Carolyn Griner has called for a work stand-down Wednesday, Sept. 23, as Marshall dedicates an entire day to safety, according to Robert McBrayer, co-chairman for Marshall's Safety Awareness Week activities. With the exception of mandatory services — such as fire, security and cafeterias — all work will be suspended to allow Center personnel to attend Safety Day activities.

The day's events will kickoff in Morris Auditorium with a program that will feature keynote speaker Fred Gregory, associate administrator of the Office of Safety and Mission Assurance at NASA Headquarters, and former astronaut.

Throughout the day, visiting astronauts and Center managers will participate in informal tours of the Center, and employees may view local safety vendors' displays promoting and educating employees on health and safety products.

Employees will be able to attend planned organizational activities, and be challenged to consider how their job duties affect the safety of flight hardware, how their work environment could be safer, and how to improve their personnel safety.

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Manufactured by Boeing at Marshall Center

NASA Accepts 'Keys' to First U.S.-Built Station Component

The Unity connecting module, the first U.S.-built component of the International Space Station, moved a step closer to orbit last week when Boeing, the manufacturer of Unity, officially handed over the module's "keys" to NASA.

Unity — manufactured by Boeing at the Marshall Center — was transported from Alabama to Florida in June 1997, where final assembly and launch preparations began.

Attached to Unity for launch are two conical mating adapters, also built by

Boeing and officially accepted by NASA last week.

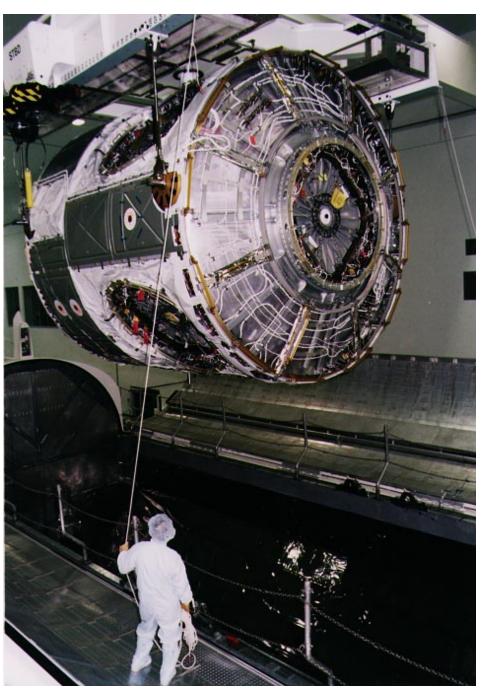
NASA accepted the module after review and certification of Unity's construction by NASA and Boeing station managers at Kennedy Space Center, Fla. Unity is scheduled for launch aboard Space Shuttle Endeavour on the STS-88 mission on Dec. 3. Unity will be launched two weeks after launch of the first station component, the U.S.-funded, Russian-built Zarya module, from the Baikonur Cosmodrome in Kazakstan. Unity will be mated to Zarya by Endeavour's astronauts to begin the five-year orbital assembly of the International Space Station.

Unity — a critical component of the International Space Station — is a six-sided connector with a berthing port on each side. Along with Unity at Kennedy, more than a half-dozen major pieces of U.S. and foreign-built hardware are now being prepared for launch.

"It is not by chance that we named this module Unity," International Space Station program manager Randy Brinkley said following the review. "The name certainly represents all of the hard work by the Boeing teams and the NASA teams, as well as the worldwide Space Station team. The Unity module has been a great joint effort."

As the Unity acceptance review board completed its official work, Royce Mitchell, Boeing's Space Station deputy program manager, handed his NASA counterparts plaques bearing a replica of a tool used to open the hatches on Unity and a symbolic "key" to the module.

The International Space Station draws upon the resources and expertise of 16 nations and is the largest and most complex international scientific project ever undertaken. Five international partners — the United States; Canada; member states of the European Space Agency; Japan and Russia; as well as Brazil and Italy as participants through the United States — are working together in a joint endeavor to explore space for the benefit of all humankind.



NASA photo

The International Space Station's Unity connecting module, manufactured by Boeing at the Marshall Center, was accepted by NASA last week at Kennedy Space Center after review and certification of the module's construction. Unity — a connecting passageway to the living and working areas of the Space Station — is scheduled to fly on the STS-88 mission Dec. 3.

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'Balancing a Successful Career With a Fulfilling Life' Topic of Seminar

The Employee and Organizational Development Office (EDTeC) is sponsoring a seminar via satellite on "Balancing a Successful Career with a Fulfilling Life." The seminar is from 12:30-2 p.m. Tuesday, Sept. 29, in Bldg. 4200, room G-13.

It also is scheduled for broadcast on the Marshall Continual Learning Channel 14.

Registration is necessary to receive course credit and a participant notebook.

Enrollment is limited and the registration deadline is 4:30 p.m. Sept. 17. Employees may register via AdminSTAR. For more information call the EDTeC at 544-3343.

Latest Lunar Prospector Findings Indicate Larger Amounts of Polar Water Ice

The north and south poles of the Moon may contain up to 6 billion metric tons of water ice, a more than 10-fold increase over previous estimates, according to scientists working with data from NASA's Lunar Prospector mission.

Growing evidence now suggests that water ice deposits of relatively high concentration are trapped beneath the soil in the permanently shadowed craters of both lunar polar regions. The researchers believe that alternative explanations, such as concentrations of hydrogen from the solar wind, are unlikely.

Mission scientists also report the detection of strong, localized magnetic fields; delineation of new mass concentrations on the surface; and the mapping of the global distribution of major rock types, key resources and trace elements. In addition, there are strong suggestions that the Moon has a small, iron-rich core. The new findings are published in the Sept. 4 issue of Science magazine.

"The Apollo program gave us an excellent picture of the Moon's basic structure and its regional composition, along with some hints about its origin and evolution," said Dr. Carl Pilcher, science director for Solar System exploration in NASA's Office of Space Science, Washington, D.C. "Lunar Prospector is now expanding that knowledge into a global perspective. The indications of water ice at the poles are tantalizing and likely to spark spirited debate among lunar scientists."

In March, mission scientists reported a water signal with a minimum abundance of 1 percent by weight of water ice in rocky lunar soil (regolith) corresponding to an estimated total of 300 million metric tons of ice at the Moon's poles. "We based those earlier, conscientiously conservative estimates on graphs of neutron spectrometer data, which showed distinctive dips over the lunar polar regions," said Dr. Alan Binder of the Lunar Research Institute, Gilroy, Calif., the Lunar Prospector principal investigator. "This indicated significant hydrogen enrichment, a telltale signature of the presence of water ice."

Lunar Prospector was launched on Jan. 6 and entered lunar orbit on Jan. 11. More information about Lunar Prospector may be found at the following Web site: http://lunar.arc.nasa.gov



NASA photo by Dennis Olive

Renegades Clinch Division 1 Softball Championship Title

For the second year in a row, the Renegades won the Division 1 Marshall Softball Championship Aug. 18. Team members are, front row, from left, Johnney Mason, John Hutt, Dan Mullane, Steve Knight, Chris Cianciola and Chris McGougan; back row, from left, Joel Anderson, Len Bell, Blake Anderson, Randy Reed, Rob Roy and Mike Rorex.

Obituary

Verderaime, Vincent, 74, Huntsville, died Aug. 29. Verderaime was an engineer serving on the Structures and Dynamics Laboratory staff. He authored numerous

technical papers and was involved in all vehicle and flight projects at Marshall. He is survived by his wife Carol Verderaime and three daughters.



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Upcoming Events

Marshall, Redstone Arsenal Join Forces to Celebrate **Hispanic Heritage Month**

In observance of National Hispanic Heritage Month, Sept. 15 through Oct. 15, the Hispanic **Employment Program Committees** for the Marshall Center and the Aviation and Missile Command at Redstone Arsenal have joined to celebrate the month.

Kicking off the event will be a blood drive campaign scheduled from 8 a.m.-1 p.m. Sept. 18 in the Bldg. 4752 all-purpose room.

Blood drives also are planned for 7:30 a.m.-12:30 p.m. Sept. 10 at the Sparkman Center, Bldg. 5309, room 9128; Sept. 10-18 at the American Red Cross, 1101 Washington Street. The American Red Cross is open from 10 a.m.-5:30 p.m. Monday-Thursday and 8 a.m.-1 p.m. Friday. Call the Red Cross at 536-0084 for more information.

For more information on Marshall Center's blood drive contact Edwina Bressette at 544-8115.

Huntsville's Big Spring Jam **Tickets Available**

Three-day discount tickets for Huntsville's Big Spring Jam — Sept. 25-27 — are available to Marshall employees and contractors at the NASA Exchange, Bldg. 4752, for \$18.

The Jam — celebrating the South's diversity of music tastes will feature jazz, rock, pop, rhythm and blues, and country music entertainers performing on five outdoor stages surrounding Big Spring Park.

Guests this year include The Doobie Brothers, Sister Hazel, The Spinners, Patty Loveless, The Gap Band, Brother Cane and Clay Crosse.

A Big Spring Jam schedule may be found at the following Web site: www.bigspringjam.org

As Part of the 1998 CFC at Marshall

Speaker Series to Start Sept. 14, Tours Sept. 18

Representatives from Combined
Federal Campaign (CFC) recipient organizations will give special presentations to employees Sept. 14-17 at Marshall. They

will show how the organizations operate and how CFC dollars are spent. "Paring is Sharing"

1998 Combined Federal Campaign theme

for Children, Hope Place Inc., Hospital Hospitality House of Huntsville Inc., Operation Home in Decatur, Huntsville Rehabilitation Center, Sterrs

> Day Care in Decatur and Technology Assistance for Special Customers

(TASC).

The Speaker Series will feature representatives from four different agencies speaking at various times and locations around the Center. The Speaker Series schedule is:

- **Sept. 14** AGAPE at 2 p.m. in Bldg. 4201, room 118
- **Sept. 15** Children's Hospital Huntsville Branch at 2 p.m. in Bldg. 4610, room 1054
- **Sept. 16** Technology Assistance for Special Customers at 2 p.m. in Bldg. 4487, room 219S
- **Sept. 17** Hospital Hospitality of Huntsville at 10 a.m. in Bldg. 4203, room 6002.

A question and answer session will following each 30-minute presentation. For more information contact Betty Canestari at 544-7178.

Tours

In addition to Marshall's Community Service Day and Speaker Series, bus tours to CFC recipient agencies will begin Sept. 18.

Employees from Marshall, including on-site contractors, will be able to tour the Alzheimer's Association North Alabama Chapter, Children's Hospital of Alabama, Family Services Center Inc., Harris Home

Goldin -

Continued from page 1 centerwide closed-circuit television. However, due to the technical requirements of this briefing, employees with hearing impairments should attend the session in a reserved area of Morris Auditorium where an interpreter will be on hand for the presentation.

For the convenience of Center employees taking the tours, two busses (A and B) will stop at Bldg. 4610 at 8:15 a.m. with a second stop at Bldg. 4203 (North loop) at 8:30 a.m. On Sept. 22, only one bus will stop at 8:30 a.m., Bldg. 4203 (North loop) for the Decatur tour. Passengers must arrive at the bus stops 10 minutes before departure. The tours should last no more than two hours.

The tour schedule is:

- **Sept. 18:** Bus A Family Services Center Inc. and Huntsville Rehabilitation Center
- Bus B Hospitality House and the Alzheimer's Association
- **Sept. 22:** Decatur tour One bus to Operation Home and Sterrs Day Care
- Sept. 24: Bus A TASC and Children's Hospital

Bus B — Harris Home and Hope Place For more information about the bus tours e-mail Karen Oliver at karen.oliver@msfc.nasa.gov or call 544-6908. The CFC kickoff is set for Oct. 5.

Superfund

Continued from page 1

in space program activity going back to at least the 1960s, when current standards for environmental protection were unheard of.

Marshall has already made a substantial amount of progress with the cleanup effort, spending \$12 million for its activities to date. The cleanup effort at the Center began in the mid-'80s, prior to Marshall being included on the Superfund list. For more information contact Mary Rutledge at 544-5252.

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Employee Ads

Miscellaneous

- ★ Murray mower w/bagger, \$75; Toro mower, \$150; Schwinn men's bicycle, 10-spd., \$75. 883-6284
- ★ Powertel cell phone, Nokia 2190E, NI-MH battery, 100' talk, 22-hour standby, AC/DC charger, \$85. 533-1506
- ★ Moving boxes, various sizes, dishpacks, wardrobes, packing paper, 75 cents-\$3 each; Queen sofa sleeper, \$300. 922-9387
- ★ Above-ground pool with filtering system, you move, \$100. 880-3181
- ★ 1986 Sweetwater pontoon boat, 24', w/1988 Mercury, 60HP engine and tandem-axle trailer, \$4,200. 582-4051
- ★ 1979 built turbo, four cylinder, \$300; 1990 Probe GT sport rims, \$175; miscellaneous 1979 Mustang parts, best offer. 883-2125
- ★ Kitty playhouse with two trees, carpeted, \$75. 498-2116 after 5 p.m.
- ★ Craftsman, 10" radial arm saw with stand, 2-3/4 HP motor, \$250. 533-6473 after 6 p.m.
- ★ Formal living room suite, couch, coffee table, end tables, wing backs; big-screen TV, not working. 837-0085
- ★ NordicTrack-Pro cross country ski-exerciser with electronic speedometer, \$250. 353-5663
- ★ Sega Gamegear with games and accessories; gameboy games and accessories. 852-0142
- ★ HP48G calculator, recommended for Auburn engineering students \$50, 882-6124
- engineering students, \$50. 882-6124

 ★ Yamaha DX-11 electronic keyboard, \$400. 858-0272

Vehicles

- ★ 1993 Isuzu Rodeo, V-6, 5-spd., PW/DL, cruise, CD player, \$7,300. 350-7461
- 1982 Buick LeSabre Custom, A/C, 188K miles, \$800. 852-0928 after 6 p.m.
- ★ 1988 Oldsmobile Ninety-Eight Brogham, white, 108K miles, \$3,200. 461-4816
- ★ 1992 Cadillac Sedan Deville, light blue, \$9,000. 586-6413
 ★ 1990 Buick Century Custom, AC/PW/PD/PS/
- PB, white, \$3,300 obo. 837-9338 ★ 1990 Mitsubishi Galant, auto., A/D, AM/FM
- ★ 1990 Mitsubishi Galant, auto., A/D, AM/FM cassette, red, \$2,500. 828-9494
- ★ 1987 Isuzu Pup Sport pickup, 82K miles, maintenance records, \$2,500. 883-1874
- ★ 1988 Honda Accord LXi, 102K miles, 5-spd., 4-dr., silver, \$4,500 obo. 881-8204
- ★ 1989 Pontiac Bonneville, all power, \$2,400. (931) 967-8972
- ★ 1979 Porche 911, red, 45K miles, \$12,000. (423) 894-4817

Free

- Gravel, several cubic vards. 882-6446
- ★ English Springer Spaniel, male, AKC registered, 6 yrs. old, black and white. 883-1693

Center Announcements

- Full Cost Training Full Cost training for Center employees continues 8 a.m.-4:30 p.m. Sept. 9 and 23 at the Sparkman Center in Bldg. 5304. Contact: LaVerta McGlathery, 544-7560
- MARS Ballroom Dance Club The MARS Ballroom Dance Club will offer bolero and samba lessons from 7-8 p.m. Sept. 14, 21, 28 and Oct. 5 in the Parish Hall at St. Stephen's Episcopal Church, 8020 Whitesburg Drive. Lessons are available to MARS Ballroom Dance Club members and partners/guests. Contact: Pat Sage, 544-5427
- ► NARFE The National Association of Retired Federal Employees (NARFE), Chapter 443, will meet at 9:30 a.m. Saturday, Sept. 12, at the Senior Center in Huntsville. George Bennett of Bennett's Nursery will be the guest speaker. All retired federal employees are invited. Contact: 837-0382 or 881-3168
- ✓ SWE The Society of Women Engineers North Alabama Chapter will sponsor an open house 5-7 p.m. Sept. 17 at Cedarhurst Clubhouse, 10 Northampton Drive, Huntsville. Huntsville-area engineers and family members are invited. Contact: Helen Stinson, 881-3965, or Claudinette Purifoy, 859-9839
- **TMA The Marshall Association, formerly known as the Marshall Management Association, is sponsoring "Spouse/Date Night" Sept. 29 at the Rustic Lodge on Redstone Arsenal. Guest speaker will be planetary scientist, writer and artist Dr. William Hartmann. Dress is casual with a social beginning at 6:30 p.m. and dinner at 7 p.m. Ticket cost is \$10 per person. Contact: Jerry Williams at 544-0295.
- Medical Center The Medical Center at Marshall, Bldg. 4249 is open 7 a.m.-3:30 p.m. Monday-Friday. Available Monday-Friday are: routine blood pressure monitoring, noon-3 p.m.; and allergy injection service, 8:30-10:30 a.m. and noon-2:45 p.m. Contact: Medical Center, 544-2390
- ◆ 40th Anniversary T-Shirts A second chance to order 40th Anniversary Commemorative T-shirts is being offered by the NASA Exchange. T-shirts may be ordered in adult sizes S-XL for \$10; XXL for \$11; and XXXL for \$12 and are available in 100% cotton or 50/50 blend. The deadline for placing orders is Sept. 28. Contact: NASA Exchange, 4-7564

Job Opportunities

CPP 98-106-CL, AST, Experimental Facilities Development, GS-801-14, Facilities Services Office, Project Services Division, Center Operations Directorate. Closes Sept. 10. CPP 98-109-DC, Management Analyst, GS-343-

11, Microgravity Research Program Office, Outreach & Education Office. Closes Sept. 16. CPP 98-114-CL, Physical Security Specialist, GS-080-13, Protective Services Office, Center Operations Directorate. Closes Sept. 11.

CPP 98-116-CL, Technology Transfer Specialist, GS-301-13, Technology Transfer Office, Customer and Employee Relations Directorate. Closes Sept. 10

CPP 98-119-JB, Supply Management Officer, GS-2003-14, Center Operations Directorate, Logistics Services Office, Property Management Division. Closes Sept. 9.

CPP 98-124-RE, Supv. AST, Flight Systems Design, GS-861-14, S&E, Propulsion Laboratory, Mechanical Design Division, Mechanisms Design Branch. Closes Sept. 10.

CPP 98-125-RE, ÅST, Liquid Propulsion Systems, GS-861-14, S&E, Propulsion Laboratory, Mechanical Design Division, Propulsion Systems Design Branch. Closes Sept. 9.

CPP 98-128-CP, AST, Flight Systems Test, GS-861-14, S&E, SA&I Laboratory, Systems Test Division, Development & Environmental Test Branch. Closes Sept. 11.

CPP 98-129-CL, AST, Technical Management, GS-801-14, Technology Transfer Office, Customer & Employee Relations Directorate. Closes Sept. 11. CPP 98-130-CP, AST, Flight Systems Test, GS-861-14, S&E, SA&I Laboratory, Systems Test Division, Vacuum Engineering Test Branch. Closes

CPP 98-131-JB, IFMP Program Assistant, GS-303-7, Customer & Employee Relations Directorate, IFMP Training Program Office. Closes Sept. 21. CPP 98-132-PL, AST, Flight Activity Planning, GS-801-14, S&E, Mission Operations Laboratory, Operations Engineering Division, Flight Control Branch. Closes Sept. 10.

Sept. 15.

CPP 98-133-CP, AST, Experimental Facilities Development, GS-801-14, Center Operations Directorate, Facilities Office, Plant Management Division. Closes Sept. 10.

CPP 98-134-CL, Environmental Management Specialist, GS-301-13, Environmental Engineering & Management Office, Center Operations Directorate. Closes Sept. 11.

CPP 98-135-RE, Supv. AST, Liquid Propulsion Systems, GS-861-14, S&E, Propulsion Laboratory, Mechanical Design Division, Propulsion Systems Design Branch. Closes Sept. 10.

CPP 98-136-RE, Aerospace Engineering
Technician, GS-802-13, S&E, Propulsion Laboratory, Mechanical Design Division, Mechanisms
Design Branch. Closes Sept. 11.

MARSHALL STAR

Marshall Space Flight Center, Alabama 35812

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